

# Quo vadis, EAD?

**Current use cases - from single institutions to aggregators and providers of archival management systems**

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## **Presenters**

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# TS-EAS

- Technical Subcommittee on Encoded Archival Standards at the Society of American Archivists (SAA)
- Background and work covered in this presentation:
  - <https://youtu.be/9NXNyx9py-I>



We take care of the  
formats you use to  
manage and share  
archival information

We need your  
comments,  
suggestions and  
bug reports

Your input  
drives our  
work forward

# Where you can find more

TS EAS

<https://www2.archivists.org/groups/technical-subcommittee-on-encoded-archival-standards-ts-eas>



TS-EAS on GitHub

<https://github.com/SAA-SDT>



EAD publication

<http://www.loc.gov/ead/index.html>



EAC publication

<https://eac.staatsbibliothek-berlin.de/>



Our mailing list

[EAD@LISTSERV.LOC.GOV](mailto:EAD@LISTSERV.LOC.GOV)

Reporting an issue via SAA

<https://www2.archivists.org/standards/TS-EAS-report-an-issue>



# Standards revision

Annual rolling revision cycle for minor releases

(see more on GitHub:

<https://github.com/SAA-SDT/TS-EAS-subteam-notes/blob/master/rolling-revision-cycle.md>)

Evaluate standards for potential major revision every five years following guidelines by SAA's Standards Committee

(see more:

<https://www2.archivists.org/governance/handbook/section7/groups/Standards/Development-and-Review> )

# **Presentations**

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# Repurposing descriptive data: PastPerfect, EAD3, & PHP

Lindsey Loeper

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Special Collections, Library

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[bit.ly/umbcead](https://bit.ly/umbcead)



UMBC

## Pro: Lots of access points

Collection level record in PastPerfect and PastPerfect Online

Collection level record in MARC - University catalog and Worldcat

Multi level finding aid in Word and PDF

Multi level finding aid in PHP

## Con: Moving data between these access points

Limited extraction and reformatting options

Almost all description is done by hand - copy, paste, copy, paste, etc.

Lots of room for mistakes and requires very careful QC at each step

## **NHPRC Access to Collections grant, 2014-2016**

“Implementing an EAD-XML compliant workflow at the UMBC”

### **Goals for the new workflow**

- Collection level records for all archival collections
- Repurpose data across platforms
- Include creation of MARC records
- Minimize potential for future backlogs
- Make our work accessible and adaptable
  - ◆ GitHub: /UMBC-Library/EAD-XML
  - ◆ bit.ly/umbcead



# Data guidelines and clean-up

## Arrangement

PastPerfect field	Guidelines/Rules	Description level
System of Arrangement	DACS: 3.2 System of Arrangement (Added Value)	Collection - Required
<system>	All processed collections must have this field completed to the Series level (do not include sub-series). Include series number, series title, and inclusive dates. Unprocessed or accession level records should document any arrangement present when accessioned and/or if any arrangement work was completed when accessioned. May be used for item level records if applicable. Format as a paragraph, not a list. May also be expanded in the finding aid to include sub-series, or to display as a list, if desired. Assign series with Roman numerals and subseries with capital letters. Example: Series I. Series I.A. Series I.B. Series II. Series II.A.	Accession - Required
PastPerfect screen location		Item - Optional
Archive > Structure		Include in export?
Description		PastPerfect Online, EAD
Outlines how the collection or materials being described are currently organized.		MARC
		MARC field
		351 \$a
Example	EAD tag	
Organized into three series: Series I. Personal, 1839-1994 Series II. Sun Papers, 1927-1995. Series III. Boordy Vineyard, 1933-1995.	<archdesc><arrangement enclosure analog="351\$a"><p>Organized into three series: Series I. Personal, 1839-1994. Series II. Sun Papers, 1927-1995. Series III. Boordy Vineyard, 1933-1995.</p></arrangement>	

## PastPerfect export to PastPerfect XML

PastPerfect XML transformed using XSLT:

- EAD-XML (EAD3)
- MARC XML

EAD-XML transformed using in-house batch processor to create PHP for online finding aid.

```
<date>1839-1995; bulk 1942-1989</date>  
<earlydate>1839</earlydate>  
<latedate>1995</latedate>
```

```
<unitdate unitdatetype="inclusive">1839-1995</unitdate>  
<unitdate unitdatetype="bulk">bulk 1942-1989</unitdate>  
<unitdatestructured unitdatetype="inclusive">  
  <daterange>  
    <fromdate>1839</fromdate>  
    <todate>1995</todate>  
  </daterange>  
</unitdatestructured>
```

```
<table>  
  <tr><td>Dates:</td>  
  <td>1839-1995; bulk 1942-1989</td></tr>  
</table>
```

# XSLT

```
<!-- Separation of Bulk and Inclusive Dates -->
<xsl:choose>
  <!-- If bulk date delimiter (;) exists -->
  <xsl:when test="contains(date, ';')">
    <unitdate unitdatetype="inclusive" encodinganalog="245$f">
      <xsl:value-of select="normalize-space(substring-before(date,
';'))"/>
    </unitdate>
    <unitdate unitdatetype="bulk" encodinganalog="245$g">
      <xsl:value-of select="normalize-space(substring-after(date, ';'))"/>
    </unitdate>
  </xsl:when>
  <!-- If only inclusive dates exist -->
  <xsl:otherwise>
    <unitdate unitdatetype="inclusive" encodinganalog="245$f">
      <xsl:value-of select="date"/>
    </unitdate>
  </xsl:otherwise>
</xsl:choose>
```

# Room for improvement: Subjects

**<subjects>**Universities and colleges -- History;  
Universities and colleges -- Planning;  
Schamp, H. W. (Homer Ward), 1923-;  
Dorsey, John W., 1936-;  
University of Maryland, Baltimore County;  
Lee, Calvin B. T.;**</subjects>**

Thesauri information and XML tags not exported from PastPerfect. Requires hands-on clean up post export and careful review by the Catalog Librarian.

## Single level / collection level records

1. PastPerfect Online (+ search engines)
2. MARC records in USM ILS
3. MARC records in UMBC discovery layer
4. MARC records in WorldCat
5. MARC records in ArchiveGrid

## Multi level records / finding aids

1. EAD-XML files
2. EAD-XML files in ArchiveGrid
3. EAD-XML files in NLM consortium
4. PHP files (+ search engines)
5. PHP files linked from all single level records
6. PDF files for printing

For more information...

GitHub: /UMBC-Library/EAD-XML  
[bit.ly/umbcead](https://bit.ly/umbcead)

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# THE TRUSTED OLD FRIEND: EAD 2002 and Special Collections Finding Aids

ADA NEGRARU, DEGOLYER LIBRARY, SOUTHERN METHODIST UNIVERSITY

QUO VADIS, EAD? SAA TS-EAS, JUNE 4, 2021



# SOUTHERN METHODIST UNIVERSITY

## Special Collections Libraries



- ▶ Southern Methodist University (SMU): medium-size private university in Dallas, Texas
- ▶ Special Collections within the SMU Libraries: DeGolyer, Bridwell, Hamon (Bywaters) and the University Archives.
- ▶ Types of materials: rare books, manuscripts, photographs, university archives, corporate records, artwork, mixed media, video and audio recordings, and others.
- ▶ Discoverability
  - ❑ MARC bibliographic records
  - ❑ EAD finding aids
  - ❑ Digital collections (digitized materials)

# EAD 2002 Finding Aids

- ▶ EAD2002 adopted in the early 2000s; still in use
- ▶ Conforms to DACS
- ▶ Well suited for archival and research purposes (description and discoverability)
- ▶ Published by Texas Archival Resources Online (TARO) and harvested by ArchiveGrid.
- ▶ 370 finding aids published to date

# HOW DOES IT WORK?



- ▶ **Collaboration:** Campus- wide EAD working group
- ▶ **Communication:** shared network drive, email, group meetings
- ▶ **Responsibilities:** finding aid creation; authority terms; revision; coordination
- ▶ **Workflow:** finding aid creation to publication

# MORE ABOUT WORKFLOW



# IT'S ALL IN THE TEMPLATE

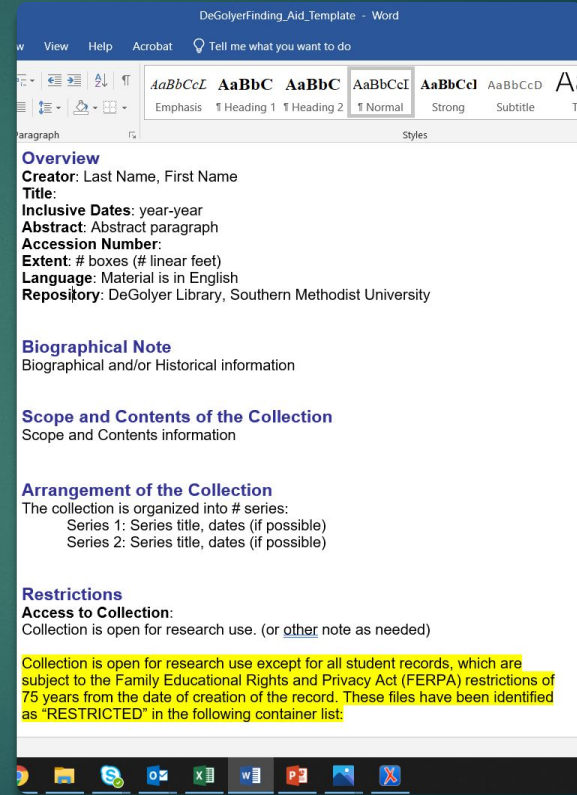


- ▶ EAD 2002 used to create finding aid templates
  - ❑ Text documents : Word
  - ❑ EAD-DTD schema - XML template: Oxygen
  - ❑ Integrates well with state consortium: CSS stylesheets
  - ❑ All needed descriptive elements: Title, Creator, Dates, Identification, Language(s), Scope and Contents, index terms, other repository and collection specific notes



# Finding aid template – Word

- Used by archivists, interns, student assistants
- Simple training process
- Enough depth for collection description and research
- Flexibility – can accommodate new institution policies (e.g. Sensitive materials note)



```
1 <?xml version="1.0" encoding="UTF-8"?>
2
3 <ead xmlns="urn:isbn:1-931666-22-9" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:isbn:1-931666-22-9 ead.xsd" relatedEncoding="MARC21">
4   <eadheader langencoding="iso639-2b" audience="internal" repositoryencoding="iso15511"
5     countryencoding="iso3166-1" scriptencoding="iso15924" dateencoding="iso8601">
6     <eadid countrycode="US" mainagencycode="US-txdam" >urn:taro:smu.00000</eadid><!-- five-digit number unique for your xml file name -->
7   </eadheader>
8   <titlestmt>
9     <titleproper><!-- Enter collection title -->, <date era="ce" calendar="gregorian" type="inclusive" normal="0000"><!-- Enter normalized date --></date> :</titleproper>
10    <subtitle>A Guide to the Collection</subtitle>
11    <author>Finding aid prepared by <!-- Enter name responsible for intellectual content of the finding aid -->.</author>
12  </titlestmt>
13  <publicationstmt>
14    <publisher>DeGolyer Library</publisher>
15    <date era="ce" calendar="gregorian"><!-- Encode the date the finding aid was published (i.e. added to TARO server) --></date>
16  </publicationstmt>
17  <profiledesc>
18    <creation>Finding aid encoded by <!-- name of encoder -->, <date><!-- Date of the initial encoding --> </date>
19  </creation>
20  <language>Finding aid written in <language langcode="eng" scriptcode="Latn">English.</language></language>
21  <desrules>Describing Archives: A Content Standard (DACS)</desrules>
22 </profiledesc>
23 <revisiondesc>
24   <!-- Used to keep track of changes and updates to the finding aid; not applicable if creating new finding aid -->
25   <change>
26     <date normal="0000" era="ce" calendar="gregorian"><!-- Enter date of change --></date>
27     <item><!-- Enter information about changes to finding aid --></item>
28   </change>
29 </revisiondesc>
30
31
32
33
```

# EAD2002 – DTD schema template

- Software: Oxygen Editor for Academic Use

# EAD 2002 – DTD schema

- Created following consortium (TARO) requirements
- Adapted to institution needs
- Straightforward encoding
- In-house training process



# WHAT ABOUT THE FUTURE?

## ► **EAD 2002 vs. EAD3**

- ❑ EAD3 has been considered and evaluated
- ❑ EAD2002 serves our purposes short to medium term

## ► **Why not EAD3 right now**

- ❑ Too structured for our current needs
- ❑ Impact on current templates and workflow
- ❑ Impact on staff workload; collection processing, other tasks would be affected
- ❑ Training costs

## ► **Potential reasons to adopt EAD3**

- ❑ Linked data
- ❑ User expectations
- ❑ If required for continued participation in TARO, ArchiveGrid, NAFAN

# From EAD to a Common Data Model

[gregwiedeman.com/slides/EAD2021.html](http://gregwiedeman.com/slides/EAD2021.html)

Gregory Wiedeman  
University Archivist  
University at Albany, SUNY

# My experience with EAD

- Learned technology by hand-encoding EAD
- Built tools to work with EAD
- Work with ASpace, ArcLight, Hyrax/Samvera
- Manage traditional archival processes
- EmpireADC advisor

# The Promise of EAD

*"An encoding standard would guarantee  
that the machine-readable finding aids  
created today would be usable  
tomorrow!"*

Daniel V. Pitti, "The Berkeley Finding Aid Project," 1994  
<http://archive1.village.virginia.edu/dvp4c/arlpap.htm>

# One Final Format

- Structure your archival description
- Preservation format, future-proof
- Easily move data between systems

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We need to give up on this dream

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- ArchivesSpace and other successful tools
- Front-end usability is still a problem
- No archival system to manage digital objects
- Funding and sustainability are challenges

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As the data structure standard, EAD defines how systems work with archival description

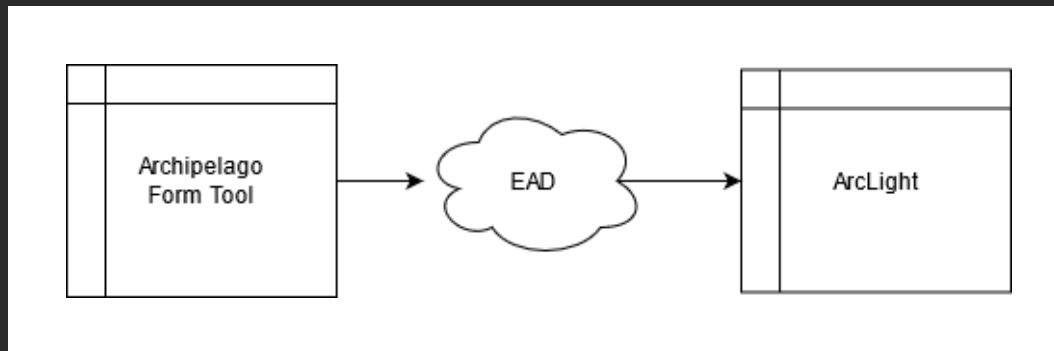


# Hard to build systems with EAD

- Variability
  - `<unitdate>` **within** `<unittitle>`
- Mixed content
  - `<language>`, `<title>`, `<date>`, etc.
- Designed with document in mind
- EAD3 is incremental improvement, adds more variability
  - `<language>`
  - `<unitdatestructured>`

# EAD is a Lossy Medium

- EAD does not have strict rules
- "Migration" problems
- EmpireADC example:

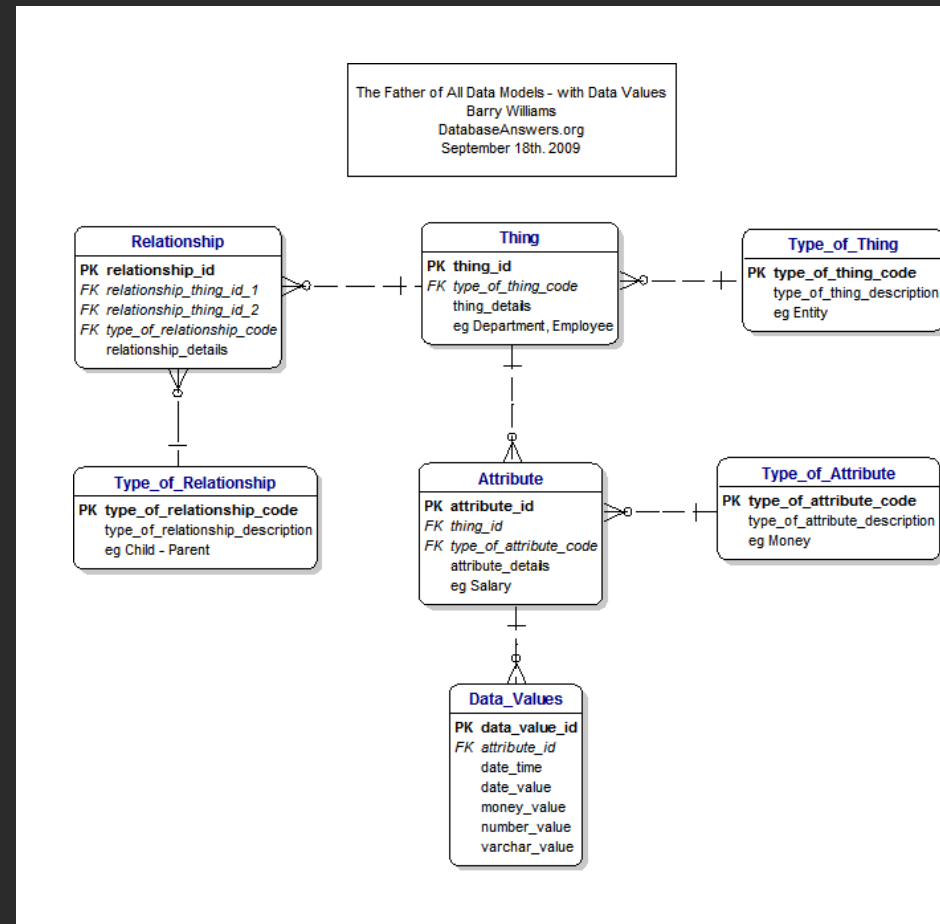


# EAD is Limiting for Aggregators

- "Raw" EAD is challenging to index
  - Hand-encoded
  - Custom authoring tools
- Requires skilled labor to normalize
- Aggregators need to rely on consistent EAD
  - ArchivesSpace
  - EmpireADC using Archipelago-based "form tool"

# From XML format to Data Model

- Accept that description will live in multiple formats and systems
- Standardize data structure, not format



# Date Problems

Dates

Add Date ?

Label \*

Creation

✕

Expression \*

1990

Type \*

Inclusive Dates

Begin

Bulk Dates

Inclusive Dates

End

Single

e.g. YYYY, YYYY-MM, or YYYY-MM-DD

Certainty

▼

Era

ce

▼

Calendar

Gregorian

▼

+

- EAD2002:
  - TYPE – not required. May be used to specify whether the date is “bulk” or “inclusive.”
- EAD3:
  - @unitdatetype – not required. Use to record whether the unit dates are bulk or inclusive. Possible values: bulk, inclusive.

ASpace exported "single" <unitdate> without @type

# Date types in ArcLight

- Combines dates to Solr field:  
`normalized_title_ssm`

Michelle Crone Papers, 1927-2000, bulk 1982-1995

☐ BOOKMARK



AIDS, 1985-1989, 1992, 1993, 1995, Undated

REQUEST

# ArcLight Bug

- Originally assumed one date
- then expected `@type="inclusive"` or `@type="bulk"`

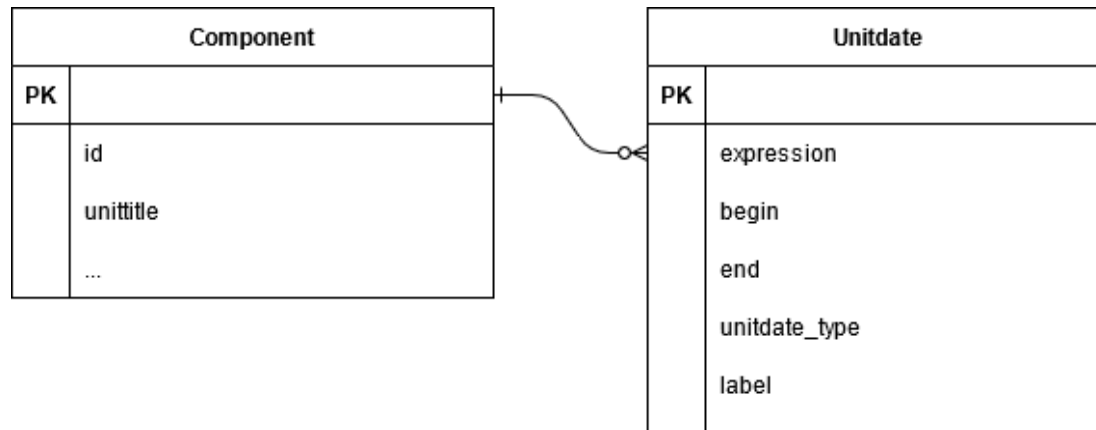
General Administrative Files, 1965-1966, 1978-1990,  
1963, 1994, undated



# Date Problems

- Misunderstanding between tools
- EAD does not clearly define the structure of dates

# Data Model: A Set of Rules



# Expressed in JSON

```
{  
  "expression": "1958 May 31-1960 June 2",  
  "begin": "1958-05-31",  
  "end": "1960-06-02",  
  "date_type": "inclusive",  
  "label": "creation"  
}
```

# Expressed in EAD2002

```
<unitdate label="creation" type="inclusive" normal="1958-05-31/19  
1958 May 31-1960 June 2  
</unitdate>
```

# Expressed in EAD3

```
<unitdatestructured label="creation" unitdatetype="inclusive">
  <dateset>
    <daterange>
      <fromdate standarddate="1958-05-31">1958 May 31</fromdate>
      <todate standarddate="1960-06-02">1960 June 2</todate>
    </daterange>
  </dateset>
</unitdatestructured>
```

# Serialization is easier

- Let the technologists deal with that
- Rely on common conventions for implementations
  - EAD2002
  - EAD3
  - JSON
  - Records in Context ontology (RiC-O)
  - Spreadsheets

# EAD already relies on conventions

```
<extent>32 cubic ft.</extent>  
<extent units="cubic ft.">32</extent>
```

# More inclusive approach

- Migration will be required at some point
- Lowers cost of systems and integration
- Allows new possibilities for small repositories
  - Google Forms
  - Spreadsheets
- Allows broader professional participation



# From EAD to a Common Data Model

[gregwiedeman.com/slides/EAD2021.html](http://gregwiedeman.com/slides/EAD2021.html)

Gregory Wiedeman  
University Archivist  
University at Albany, SUNY

# Thanks!

- The recording will be available on YouTube:

<https://www.youtube.com/user/saastaff>

- Feedback? Suggestions for ...? Please complete our survey!

<http://bit.ly/eadwebinar>